

Will Automation Improve Transitions of Care?

On July 1, 2011, the Accreditation Council for Graduate Medical Education implemented new limits on resident duty hour restrictions to address concerns about patient safety. Extensive scientific data demonstrated decreased performance in fatigued individuals, with shifts exceeding 12 to 16 consecutive hours deemed unsafe.¹ In the aftermath of the new limits on continuous duty for first-year residents, their effect on patient safety and resident satisfaction is largely unknown, and early evidence suggests no improvement.² A systematic review by Ahmed et al³ of 135 articles evaluating the impact of the duty hour limits on patient mortality demonstrated no overall improvement in patient outcomes. Some studies included in the review suggest increased complication rates in high-acuity patients. In addition to questionable safety improvements, research has found negative performance on certification examinations.³

The limits on continuous duty for first-year residents have resulted in a larger number of transitions of care,⁴ commonly known as handoffs. Critical information may be lost in this transition, with a negative effect on patient care. Important factors in effective handoffs include face-to-face communication, opportunities to ask questions, private handoff locations, accompanying written documentation, nondistracting environments, and minimization of interruptions.⁵ An accurate, concise document containing a synopsis of the patient, along with pertinent results, tasks, and conditional action statements, is a vital tool to increase the effectiveness of these transitions of care. Creating such a document requires daily updating and revision, which can be challenging given time constraints.

To our knowledge, errors and discrepancies in electronic health record data related to handoff documentation have not been well studied to date. We propose the use of a system to automatically populate data in handoff (or sign-out) documents. The benefits will be (1) standardization of this information, and (2) reduction of discrepancies between the handoff document and the electronic health record. Errors in handoff documents have the potential to

impact patient safety, as clinical decisions are often made on the basis of the medications or laboratory values in these documents. This approach will need to be studied to assess its effectiveness in decreasing patient risk associated with handoffs in teaching settings, and in other clinical situations.

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The views expressed in this letter are those of the authors and do not reflect the official policy of the Department of Defense or the US Government.

References

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